REMARKS/ARGUMENTS

Claims 1-4, 12, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Maeda (US 2004/0061812). Claims 9-11, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatenable over Maeda as applied to claims 1-4, 12 and 23 above. Claims 5-8, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatenable over Maeda as applied to claims above 1-4, 9-15 and 20-23 and further in view of Shibata (US 5,724,108).

1. Rejection of claims 1-4, 12, and 23:

Claims 1-4, 12, and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Maeda (US 2004/0061812).

Maeda discloses a liquid crystal display device comprising (see at least Figures 1-2): a liquid crystal display panel 11; a light source for providing light beams to irradiate the liquid crystal display panel; and an optical sheet positioned between the liquid crystal display panel and the light source and having a first surface facing the light source, the first surface having a plurality of prisms for totally reflecting portions of ambient light beams that have passed through the liquid crystal display panel to irradiate the liquid crystal display panel.

Maeda discloses the liquid crystal display device comprising each of the prisms being a symmetric structure or an asymmetric structure.

Maeda discloses the liquid crystal display device comprising each of the prisms comprises a first plane and a second plane for totally reflecting portions of the ambient light beams that have passed through the liquid crystal display panel (see at least Figures

1-2).

Maeda discloses the liquid crystal display device comprising the optical sheet comprising a second surface facing the liquid crystal display panel (see at least Figures 1-2).

Response:

Claim 1 has been amended to contain the limitation present in original claim 3 and the limitation present in paragraph [0030] of the specification. Claim 12 has been amended to contain the limitations present in original claims 13, 15 and in paragraph [0030] of the specification. Claims 3, 13 and 15 have subsequently been cancelled. The limitation of "the included angle between the first plane and the second plane being in the range between 80° and 130°" contained in paragraph [0030] has been added to claim 1 along with the limitations of claim 3. The limitation of "the included angle between the first plane and the second plane being in the range between 80° and 130°" contained in paragraph [0030] has been added to claim 12 along with the limitations of claims 13 and 15.

The Examiner points that Maeda discloses a liquid crystal display device similar to the present application for totally reflecting portions of ambient light beams that have passed through the liquid crystal display panel to irradiate the liquid crystal display panel. However, **the two liquid crystal display devices are designed to guide ambient light beams through different ways, so the included angles between the first plane and the second plane are different**. According to figure 2, table 1 and paragraph [0053]- [0055] of Maeda's disclosure, the ambient light beams are refracted four times and reflected twice, and the included angle between the first plane and the second plane is set in the range between 63° and 68°. In contrast, the ambient light beams of the present

application are designed to be refracted twice and reflected twice, and the included angle between the first plane and the second plane is usually in the range between 80° and 130 °. In optical system, the positions and the directions of the optical components indeed affect the passing way of light beams, and affect the viewing effect.

Accordingly, Maeda does not teach a liquid crystal display device with a included angle between the first plane and the second plane in the range between 80° and 130°, so the amended claims 1 and 12 should be patentable in comparison with Maeda's disclosure. Reconsideration of claims 1 and 12 is respectfully requested.

Since claims 2, 4 and 23 are dependent upon claims 1 and 12 respectively, they should be allowable if claims 1 and 12 are allowable. Reconsideration of claims 2, 4 and 23 is hereby requested.

2. Rejection of claims 9-11, 13-15 and 20-22:

Claims 9-11, 13-15 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatenable over Maeda as applied to claims 1-4, 12 and 23 above for reasons of records, as cited in pages 3-4 in the above-identified Office action.

Response:

Referring to claims 9-11, 14 and 20-22, since Maeda does not teach a liquid crystal display device with a included angle between the first plane and the second plane in the range between 80° and 130°, the amended claims 1 and 12 should be patentable in comparison with Maeda's disclosure. As claims 9-11 are dependent upon claim 1 and claims 14, 20-22 are dependent upon claim 12, they should be allowed if claim 1 and claim 12 are allowed. Reconsideration of claims 9-11, 14 and 20-22 is respectfully

requested.

3. Rejections of claims 5-8 and 16-19:

Claims 5-8, 16-19 are rejected under 35 U.S.C. 103(a) as being unpatenable over Maeda as applied to claims above 1-4, 9-15 and 20-23 and further in view of Shibata (US 5,724,108) for reasons of records, as cited in page 4 in the above-identified Office action.

Response:

The Examiner points that Shibata discloses a liquid crystal display device comprising an optical (prismatic) sheet employing the Snell law of refraction, wherein the display device yields advantages such as widening viewing angle characteristic. However, the liquid crystal display device of Shibata's disclosure is different from the present application. According to Figure 1(a), 1(b), 6, 13, Shibata discloses a liquid crystal display device comprising an optical sheet having a plurality of prisms facing the liquid crystal display panel. The optical sheet is used for converging the emitted light to increase the brightness of the backlight with the same power consumption as used in the conventional apparatus and to reduce power consumption of the backlight. However, Shibata does not disclose an optical sheet having a plurality of prisms facing the light source. Furthermore, Shibata does not teach utilizing the optical sheet to totally reflect portions of ambient light beams that have passed through the liquid crystal display panel to irradiate the liquid crystal display panel.

According to Figure 3, Shibata discloses the emitted light beams are refracted twice and not reflected. **Neither Maeda nor Shibata teaches utilizing an optical sheet to refract the ambient light beams twice and reflect the ambient light beams twice so as to totally reflect portions of ambient light beams and irradiate the liquid crystal display panel. Thus, the combination of Maeda's structure and Shibata's Snell law of refraction can not brings an optical sheet with an included angle between 80° and**

130°. Therefore, the amended claims 1 and 12 should be allowable in comparison with the cited references.

As claims 5-8 and 16-19 are dependent upon claims 1 and 12 respectively, they should be allowed if claims 1 and 12 are allowed. Reconsideration of claims 5-8 and 16-19 is respectfully requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

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Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C. is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.)